



On-Site Wastewater Disposal in a Subdivision

Disposal of Wastewater in Residential Housing Developments

10 CSR 20-6.030

Water Protection Program fact sheet

8/2007

This fact sheet is to help developers and other interested parties understand the Residential Housing Development Rule and how subdivisions receive approval. A copy of 10 CSR 20-6.030 Disposal of Wastewater in Residential Housing Developments can be found at www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf.

The purpose of this rule is to determine the method of wastewater disposal in all new developments but have not yet received department approval, and those that were required to comply with previous regulations. Previous regulations were effective June 30, 1974, June 26, 1975 or May 14, 1984.

As described in the rule, developments must receive approval from the department if the proposal has seven or more lots where each of those lots are less than five acres in size and use individual single family on-site wastewater systems. The department must also approve any expansion of an existing subdivision by three or more lots, where each of those lots is less than five acres in size.

To receive written approval from the department for the method of wastewater disposal, a developer must submit a copy of the geohydrologic evaluation, soils report and plat map. Please note that written approval from the department must be obtained prior to the sale, lease or the start of construction on any of those lots less than five acres in size by the developer or any other individual.

Geohydrologic Evaluation - Section (2)

The department's Division of Geology and Land Survey conducts the geohydrologic evaluation to determine the minimum lot size based on groundwater contamination potential only. A copy of the Request for Geohydrologic Evaluation of Residential of Residential Housing Development (Subdivision) Form (MO 780-1690) is available at www.dnr.mo.gov/forms/780-1690.pdf.

The department does not charge a fee for this service. The geohydrologic evaluation is not an approval under the Residential Housing Development (Subdivision) Rule.

Soils Report - Section (3)

A soil scientist, as defined in 19 CSR 20-3.080 and hired by the developer, must prepare a soils report for each residential housing development. The report must indicate if the proposed system is a soil absorption system or other system (lagoon). The soils report can be generated only after a thorough, systematic investigation of the soil properties and landscapes in the proposed development. Please note that not all individuals listed with the Department of Health and Senior Services as On-site Soil Evaluators are qualified as a soil scientist, as defined in 19 CSR 20-3.080.

Soil observation pits (backhoe or hand dug) dug to a depth to reveal the major soil horizons shall be utilized. The minimum number of pits shall be one every 10 acres. However, in developments with the majority of lots less than two acres, the minimum number of pits shall be one every five acres.

The soils report shall contain a topographic map delineating the proposed development into the following slope categories: 0 to 2 percent, 3 to 14 percent, 15 to 30 percent and 31 percent and greater.

The applicant must also provide a map delineating the depth of acceptable soil into the following categories: less than 18 inches, 18 to 30 inches over bedrock, 18 to 30 inches over a limiting layer, and greater than 30 inches.

Once the documentation is compiled, the applicant shall use Table 1 to determine the minimum lot size based on soil properties and site conditions. More than 50 percent of each lot must be in a single acreage category or more than 50 percent may be in that and smaller acreage categories in order to use that minimum sized lot.

TABLE 1
Minimum Lot Size (Acres) for Soil Absorption Systems
Based on Soil Depth and Slope Acceptable Soil (inches)

		>30"	18 to 30" Limiting Layer	18 to 30" Bedrock	<18"
	0 to 2	0.92	2	2	3
Slope (%)	3 to 4	0.92	1	2	3
	15 to 30	1	2	3	5
	31+	2	3	5	>5

Plat Map - Section (4)

The applicant must provide a preliminary plat map drawn to a scale of one inch equals from 50 to 200 feet showing the location of the individual lots, roads, existing wells, and known easements. The number of lots, lot sizes and type of water supply shall also be provided. Please note that the department is only requesting a preliminary plat. It is not required that the actual field surveying be conducted prior to approval.

A copy of the U.S. Geological Survey topographic map and the soil map and legend from the U.S. Department of Agriculture County Soil Survey if available must also be provided with the area of development clearly outlined.

Example to determine minimum lot size:

A proposed development received a geohydrologic evaluation of 1.4 minimum acres based on ground water contamination potential only.

The soils report gave a 1.0 acre minimum on the ridge tops and shoulder slopes with the side slopes receiving a 2.0 acre minimum based on the soil and landscape properties.

As described in Section (7)(A) of the rule the minimum lot size will be calculated from the larger value of the geohydrologic evaluation or the soils report. So, as described above if a lot can be configured in a manner where greater than fifty percent (50percent) is of the lower acreage based on the soil and landscape properties then it can be that lower acreage as long as it does not go below the geohydrologic evaluation. It should be noted that the lower acreage must be assessable and usable to treat and control the effluent in an effective manner. If that can not be demonstrated then the minimum lot size would be the large value. Using this scenario lot sizes could be 1.4 to 2.0 acres and larger.

Please remember this is an example only; lot size will vary throughout the state depending upon the geology, the soils and the topography within your proposed development.

Department Review - Section (7)

Once all the documentation, the geohydrologic evaluation, the soils report, and the preliminary plat is gathered it can then be submitted for approval. To ensure the approval can be done in an efficient manner and reduce any delays please submit all of the required documentation at one time. A copy of the Request for Approval under 10 CSR 20-6.030 Disposal of Wastewater in Residential Housing Developments form (MO 780-1706) is available at www.dnr.mo.gov/forms/780-1706.pdf.

The request for approval is submitted to the departments, Water Protection Program, Water Pollution Control Branch, NPDES Permits and Engineering Section, which will determine if the materials submitted satisfy the rule. The department does not charge a fee for this service.

When a developer receives written approval for any development they shall comply with all conditions set-forth in writing by the department as contained in the Missouri Clean Water Law and corresponding regulations, prior to the sale or lease of any lot or the commencement of construction on any lot by any developer(s) or owner(s).

The effluent from the on-site wastewater system shall be contained on the lot and handled in such a manner that there is no violation of the Missouri Clean Water Law and Regulations.

Residences are intended for single family residences and only one shall be constructed on each lot for the purpose of compliance with this rule.

After written approval is given there shall be no deviation or change that may adversely affect the geohydrologic evaluation, lot sizes, number of lots or the proposed water supply for the development without first securing written approval of the proposed changes from the department.

Approval for the method of wastewater disposal under 10 CSR 20-6.030 should not be construed as approval for the reported water supply nor does it excuse the developer or any other individual from complying with or from liability for violations of the Missouri Clean Water Law and regulations or any other state or local laws.

Once written approval is given for a subdivision, the developer should contact either the Department of Health and Senior Services or local administrative authority (commonly the local health department) who will provide assistance and information about on-site wastewater treatment systems, construction permits, and if required issue the authorization to construct permit for the individual on-site wastewater system.

Summary

Written approval from the department for a subdivision under the Residential Housing Development (Subdivision) Rule is only for the method of wastewater disposal.

When written approval is required, the developer or any other individual must receive it from the department, prior to the sale, lease or the start of construction on any lot.

The approval should not be considered as approval for any other Missouri Clean Water Law, regulations or any other state or local laws.

To reduce any possible delays with a development and to assist you with other permits that may be needed for a subdivision, the department recommends you visit the Permit Assistant Web site at www.dnr.mo.gov/mopermitassistant.

The department understands there is an infinite number of "What if" questions that the Permit Assistant site or other related fact sheets may not be able to answer. If you still have additional questions, please contact the department for assistance with your specific questions before proceeding with any project. Do not let a misunderstanding or misinterpretation of any rule cause delays with your project.

Other developments regulated by the Residential Housing Rule (10 CSR 20-6.030) include mobile home parks, recreational developments (RV parks) and multiple family housing units. The department recommends you visit the Permit Assistant Web site, review the related fact sheets or contact the department to determine if your project requires approval.

Related Department Fact Sheets

Who Regulates Wastewater in Missouri?--PUB1296

www.dnr.mo.gov/pubs/pub1296.pdf

Multi-Family Subsurface Soil Absorption Decentralized Cluster Systems--PUB2155

www.dnr.mo.gov/pubs/pub2155.pdf

Common Promotional Plan - Disposal of Wastewater in Residential Housing Developments--PUB2225

www.dnr.mo.gov/pubs/pub2225.pdf

Storm Water Permit Requirements for Land Disturbance Activities--PUB2009

www.dnr.mo.gov/pubs/pub2009.pdf

Water Well Construction--PUB2197

www.dnr.mo.gov/pubs/pub2197.pdf

Wellhead Protection Section - Frequently Asked Questions--PUB2193

www.dnr.mo.gov/pubs/pub2193.pdf

Related Internet Web Site

Department of Health and Senior Services, www.dhss.mo.gov/Onsite

For More Information

Missouri Department of Natural Resources

Water Protection Program

Water Pollution Control Branch

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www.dnr.mo.gov/env/wpp